

US008690267B2

(12) **United States Patent**  
**Jiang et al.**

(10) **Patent No.:** **US 8,690,267 B2**  
(45) **Date of Patent:** **Apr. 8, 2014**

(54) **ASSEMBLY UNIT AND CASING HAVING THE SAME**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 153 days.

(21) Appl. No.: **13/228,620**

(22) Filed: **Sep. 9, 2011**

(65) **Prior Publication Data**

US 2012/0169198 A1 Jul. 5, 2012

(30) **Foreign Application Priority Data**

Dec. 31, 2010 (CN) ..... 2010 1 0623332

(51) **Int. Cl.**

**A47B 81/00** (2006.01)  
**A47B 97/00** (2006.01)  
**G06F 1/16** (2006.01)  
**H05K 5/00** (2006.01)  
**H05K 7/00** (2006.01)

(52) **U.S. Cl.**

USPC ..... **312/223.2**; 361/679.33

(58) **Field of Classification Search**

USPC ..... 312/223.1, 223.2, 265.6; 211/26;  
361/727, 679.31, 679.33, 679.35,  
361/679.36, 679.37, 679.38

See application file for complete search history.

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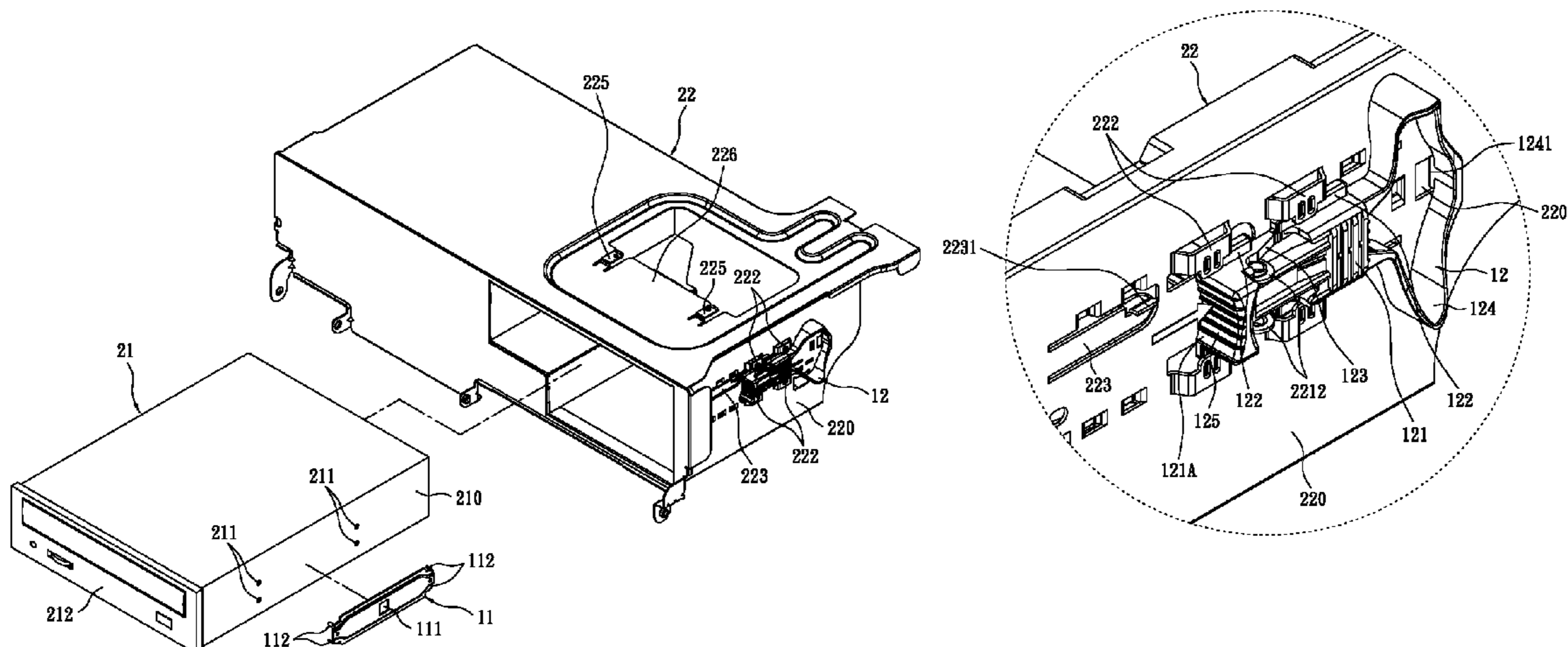
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(57) **ABSTRACT**

A an assembly unit for assembling a drawable device into a casing includes a fixing member disposed on a side wall of the drawable device and a latching member slidably disposed on the casing correspondingly to the fixing member. The fixing member has a fixing hole thereon. The casing has a first tongue portion corresponding to the latching member and a fixing protrusion protruding toward the interior of the casing; wherein the fixing protrusion engages with the fixing hole when the drawable device is assembled into the casing.

**12 Claims, 14 Drawing Sheets**



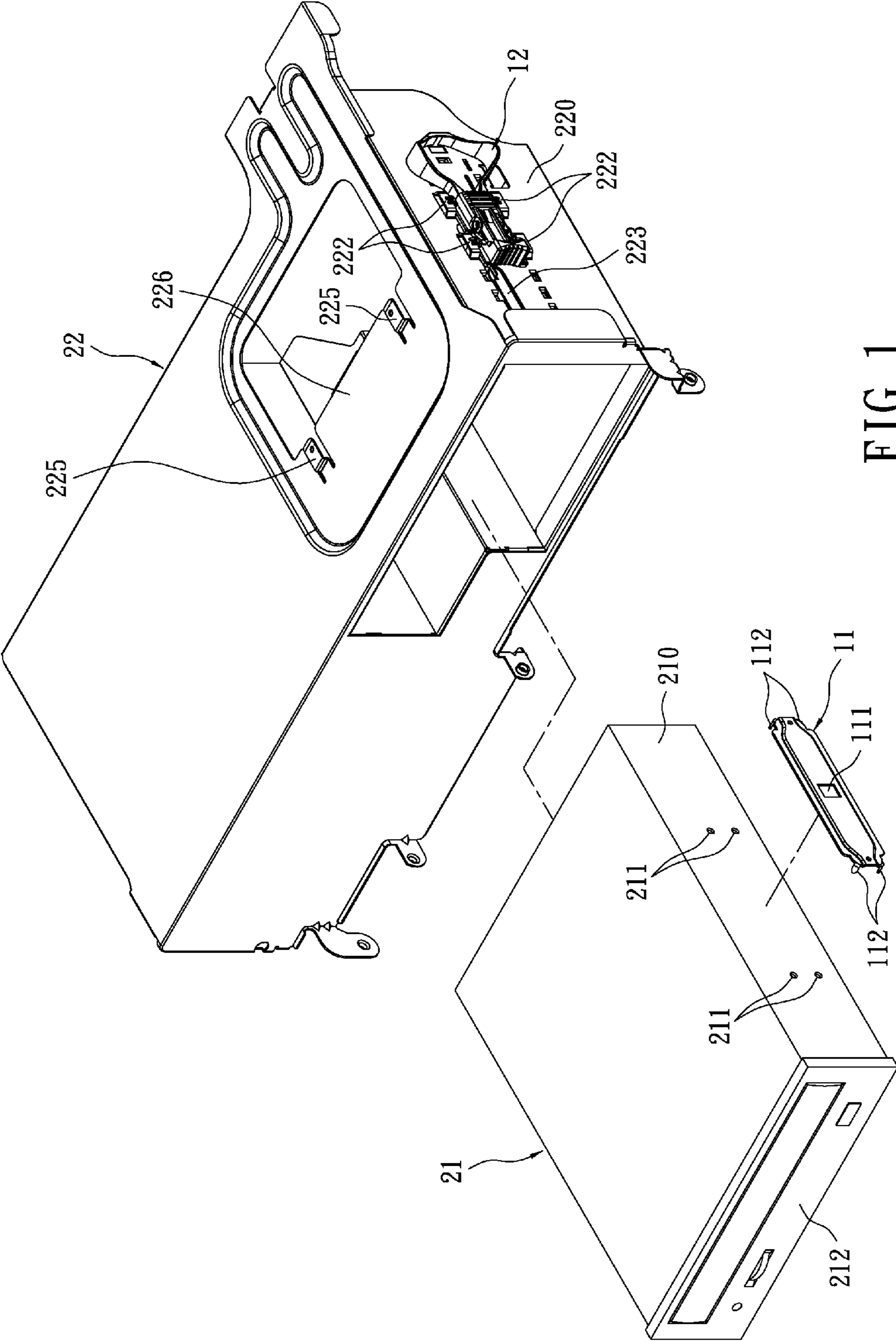


FIG. 1

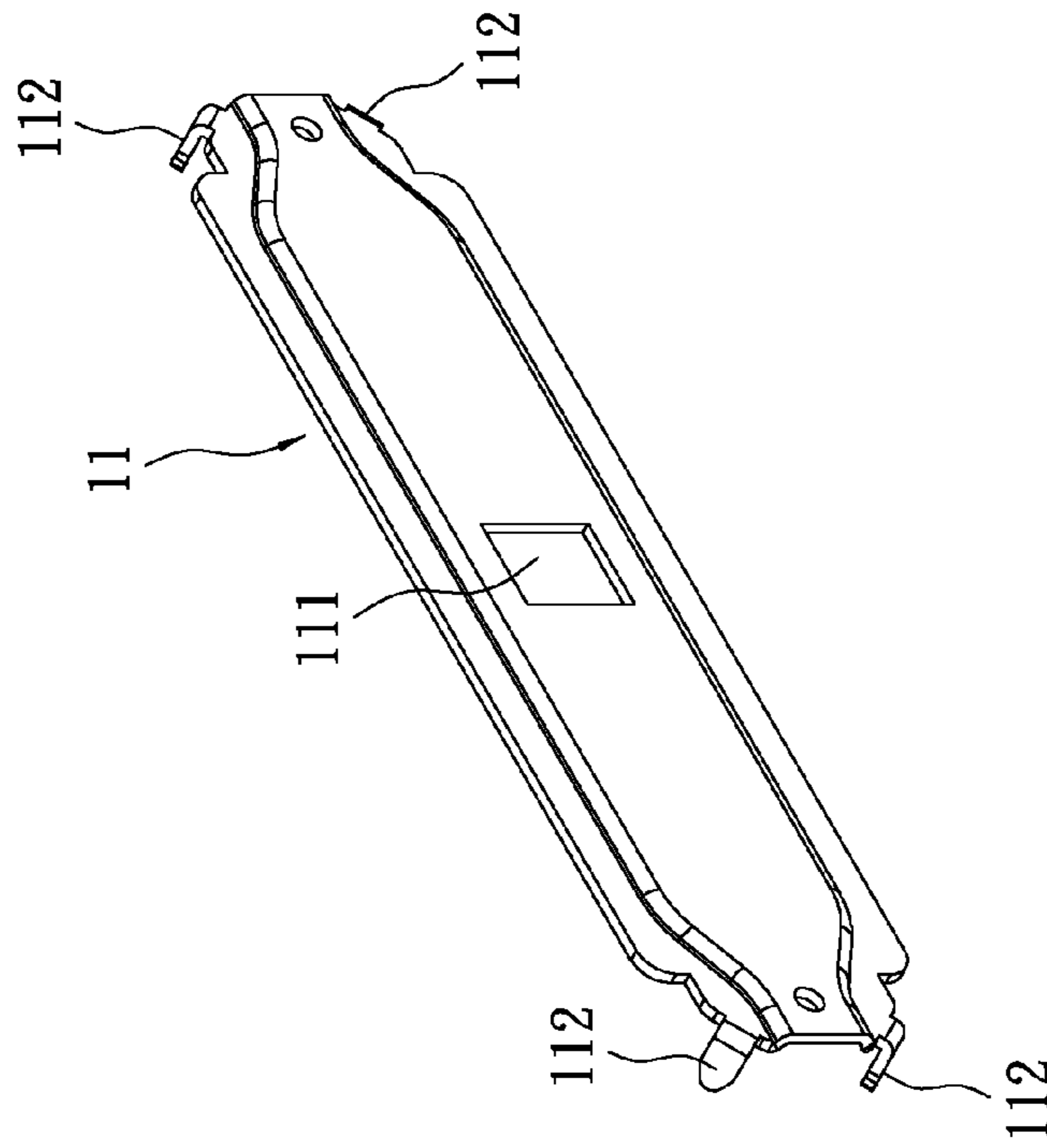


FIG. 1A

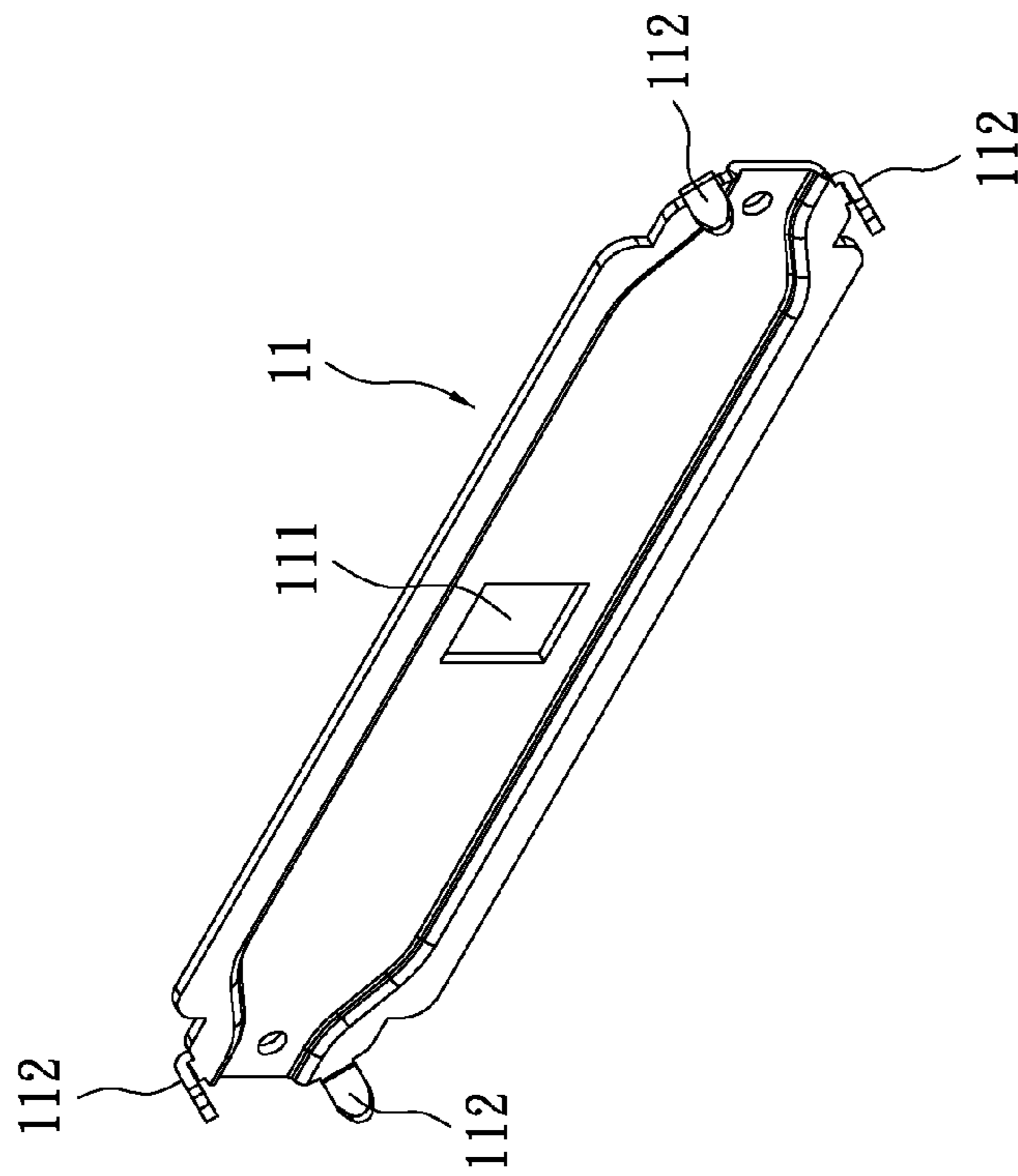


FIG. 1B



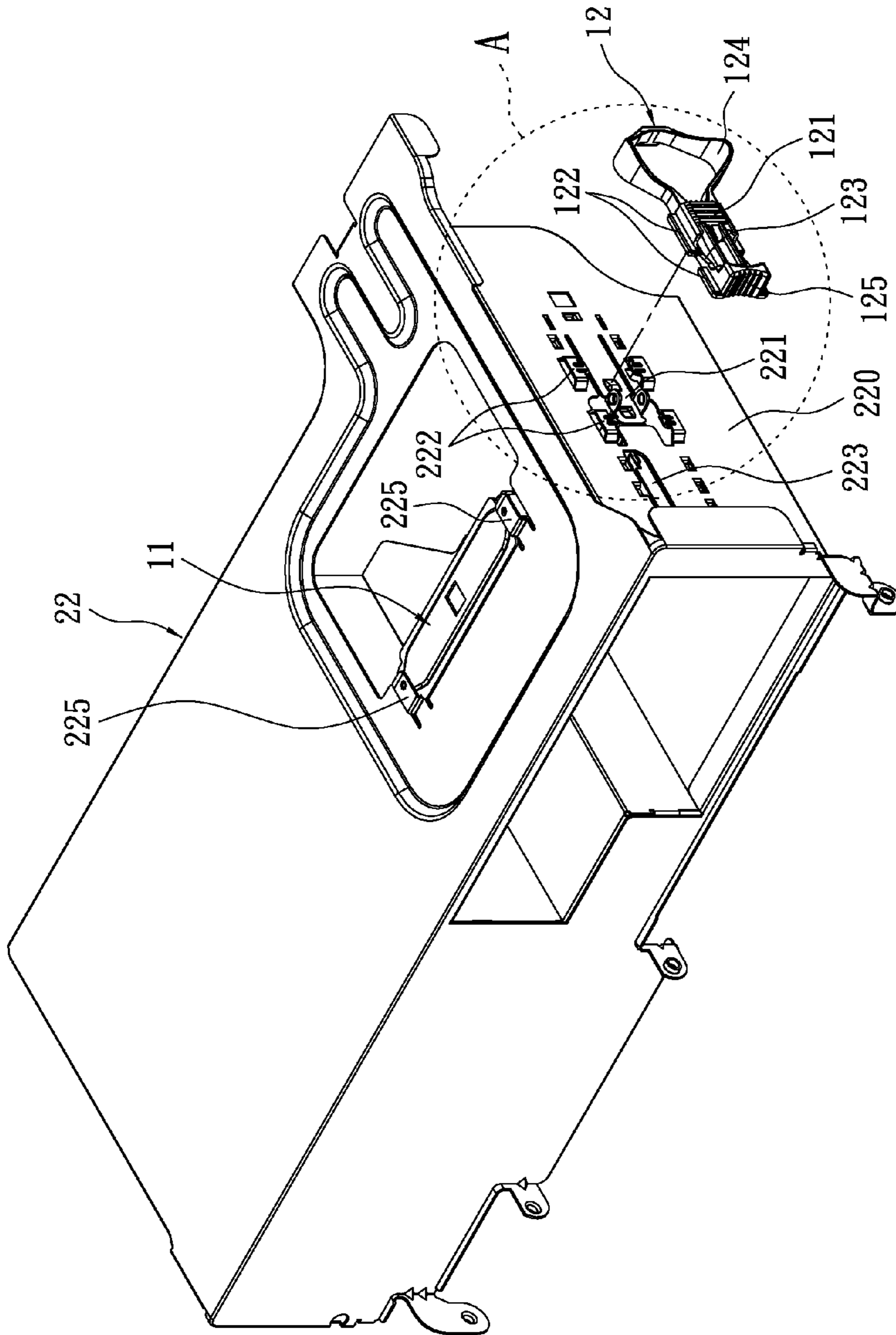


FIG. 1C

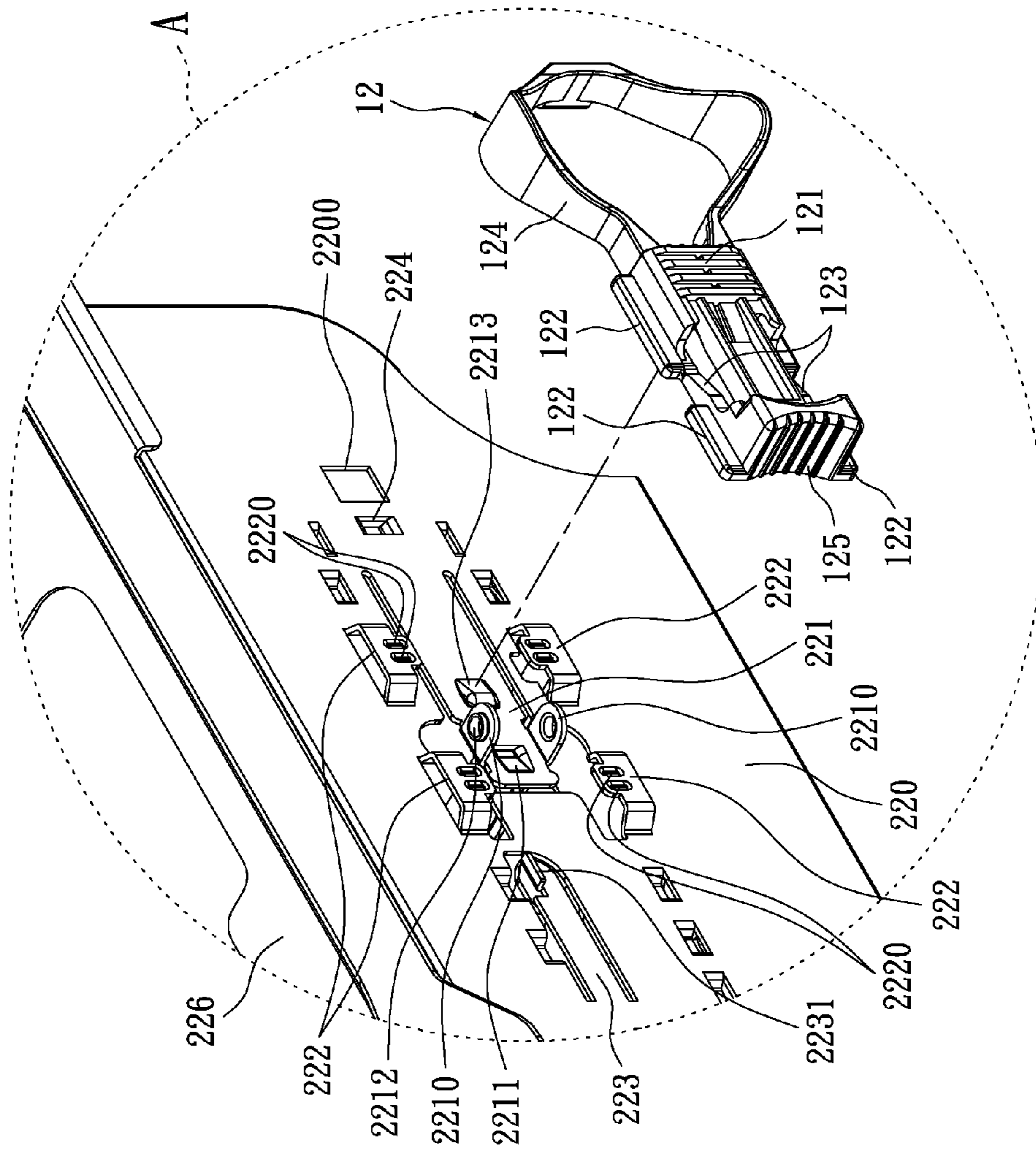


FIG. 1D

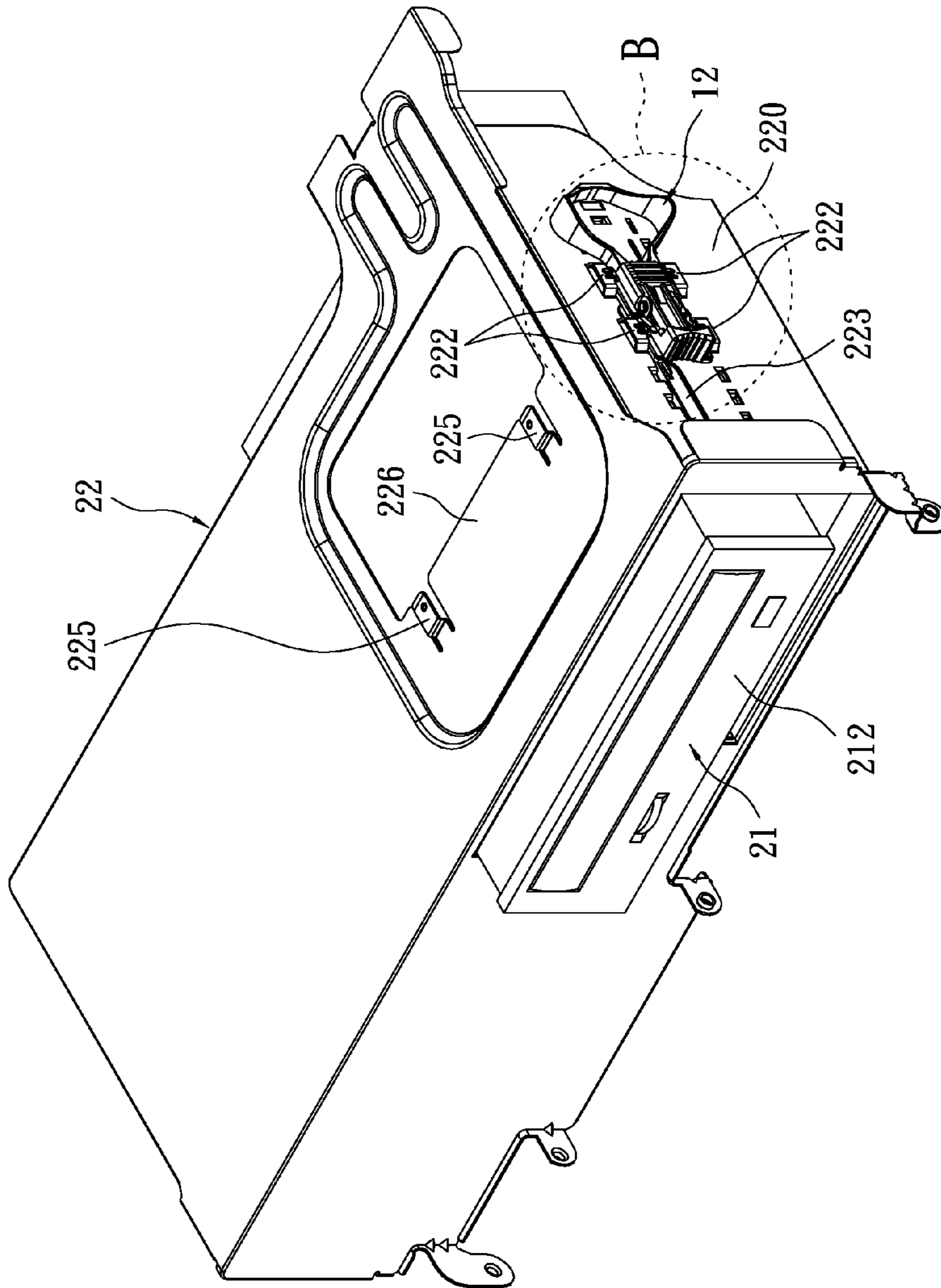


FIG. 2

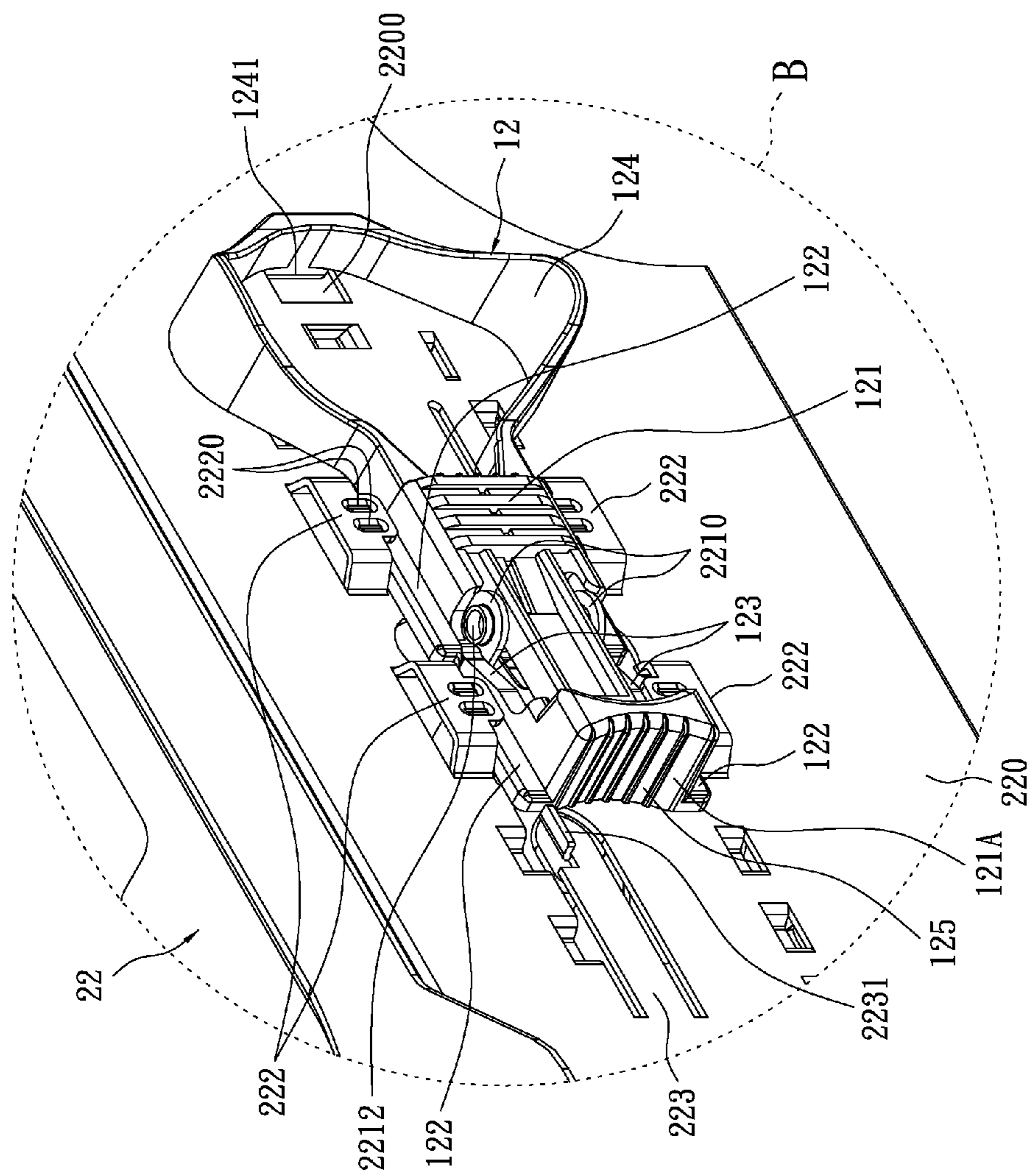


FIG. 2A

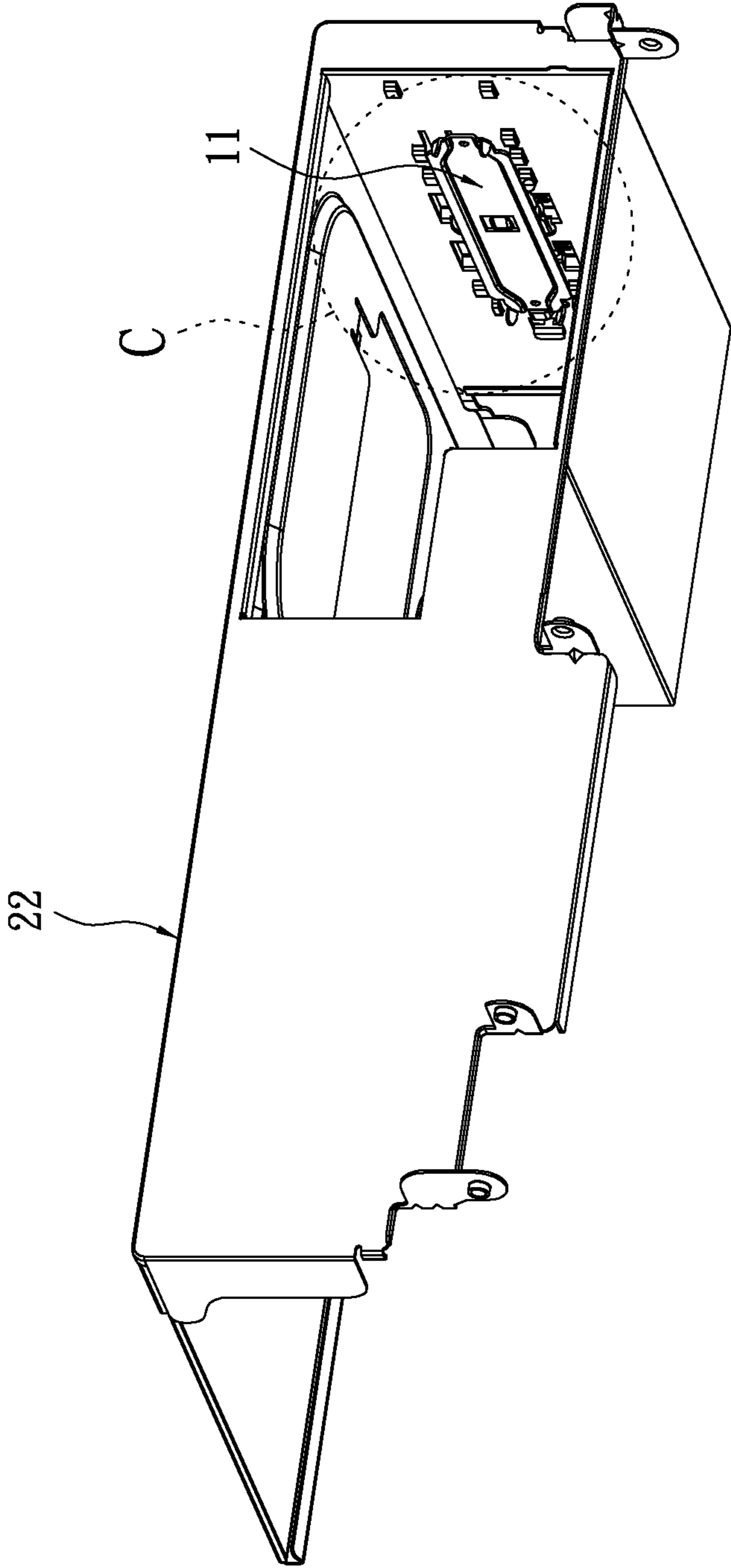


FIG. 2B



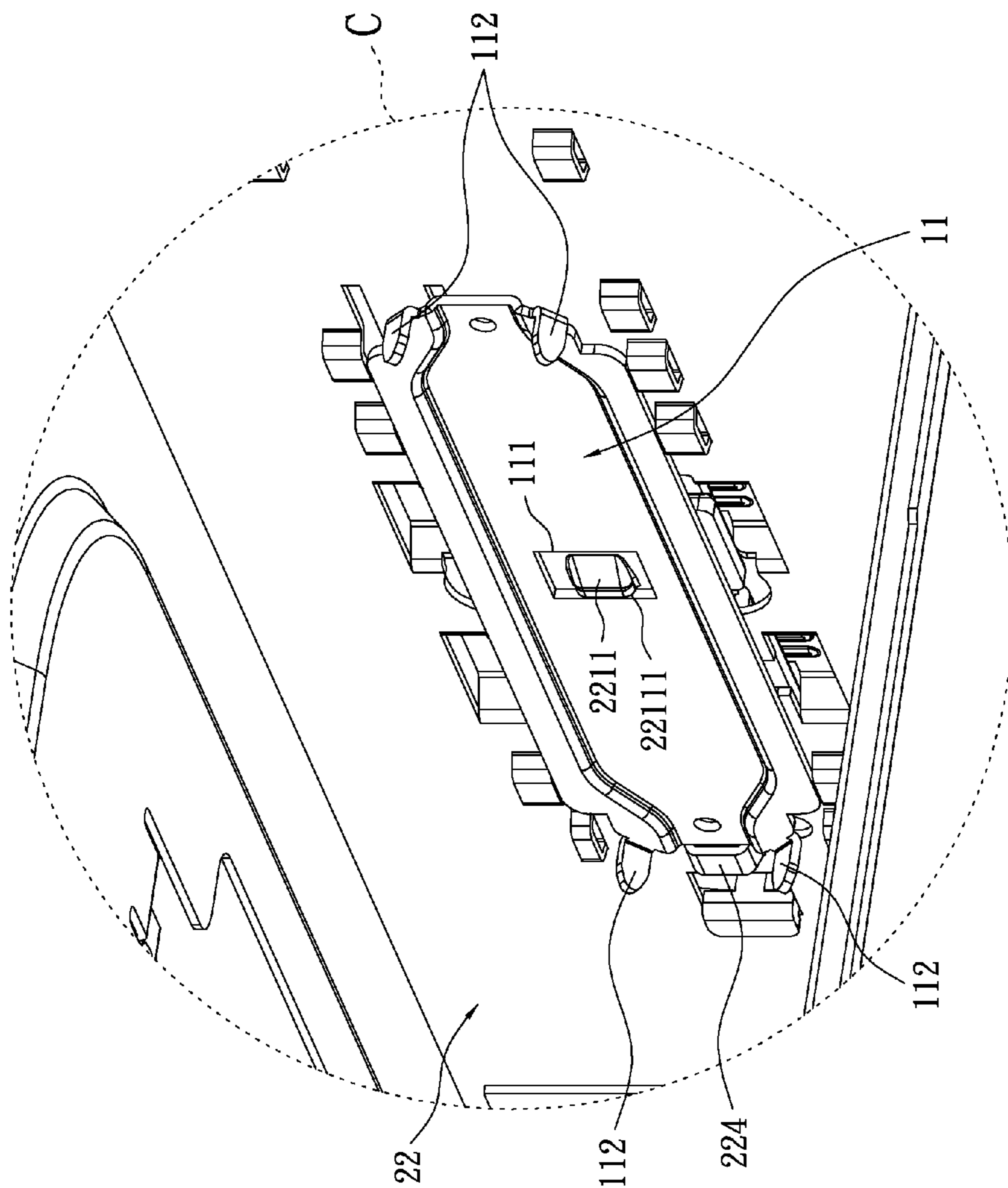


FIG. 2C

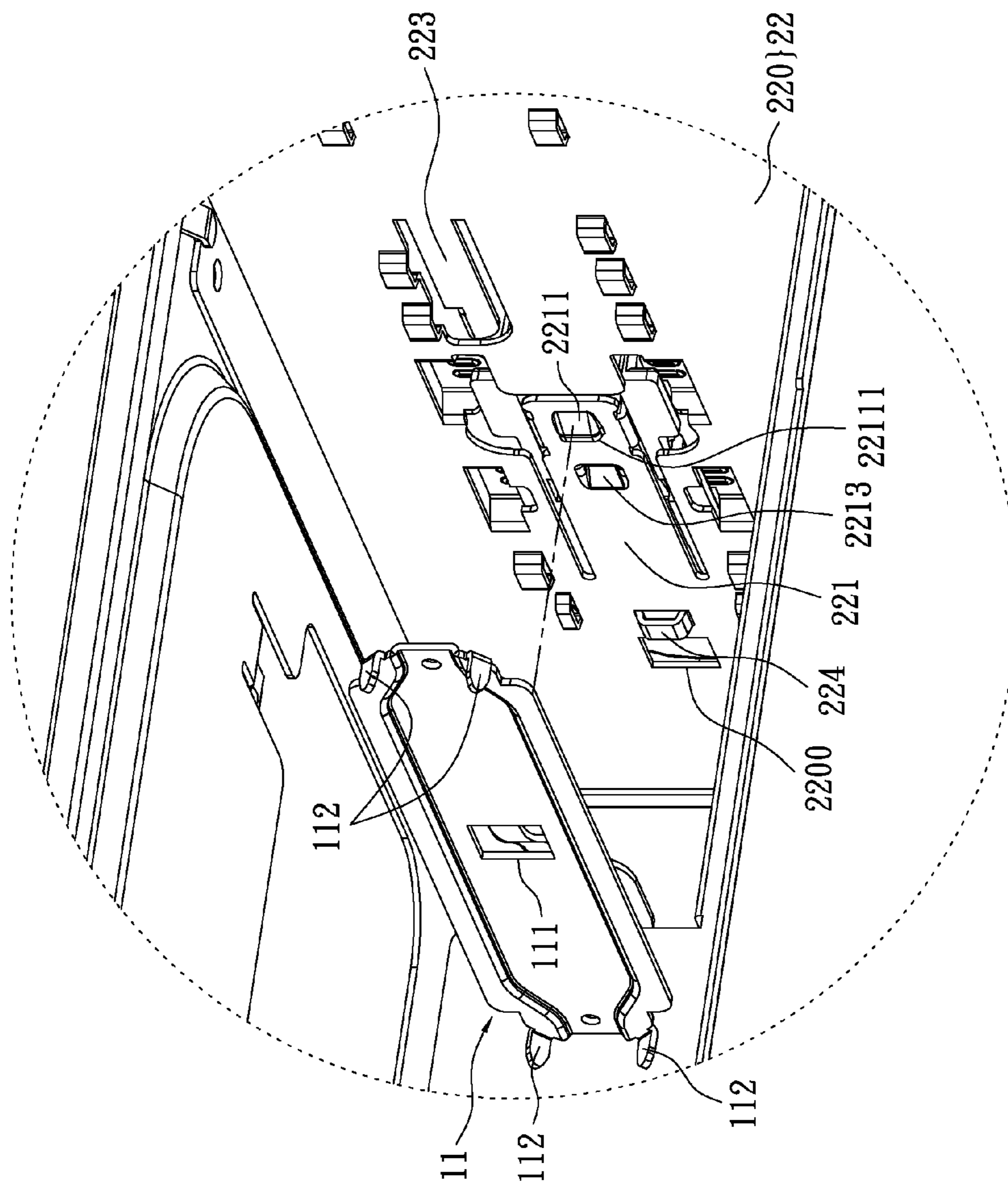


FIG. 2D

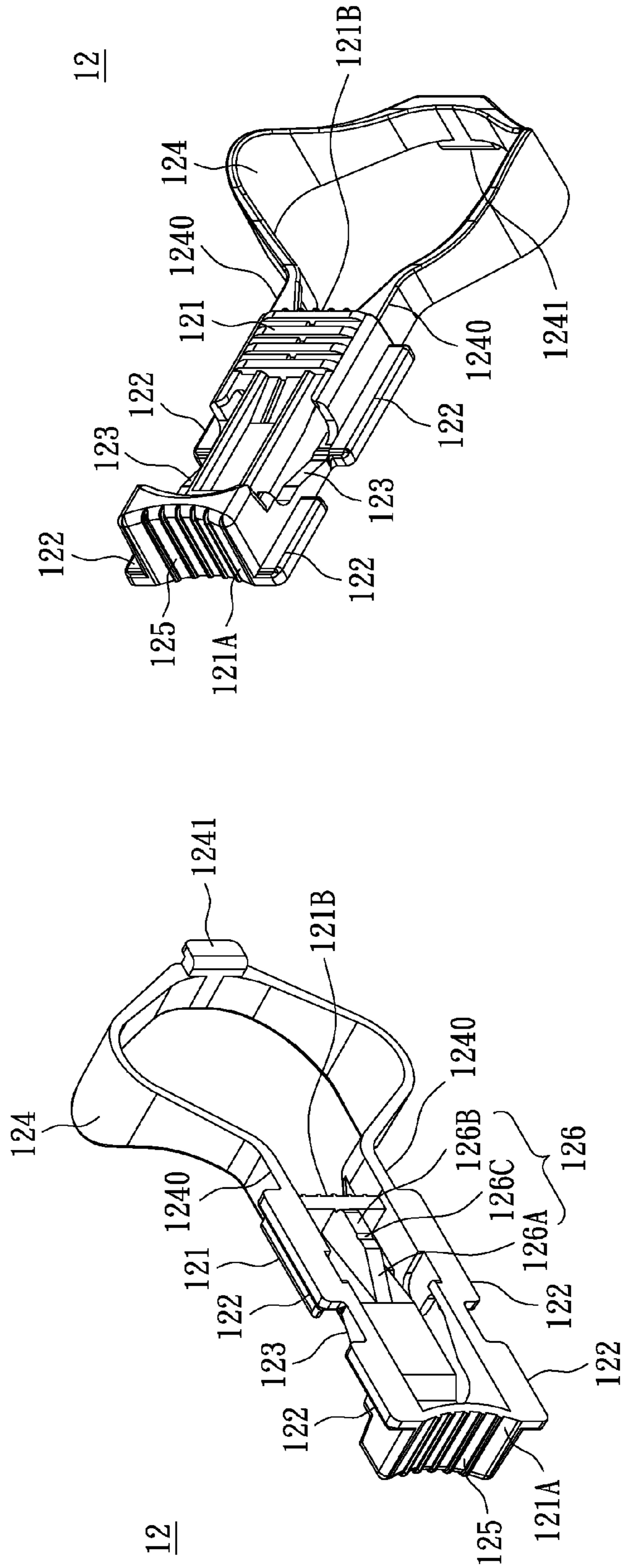


FIG. 3

FIG. 3A

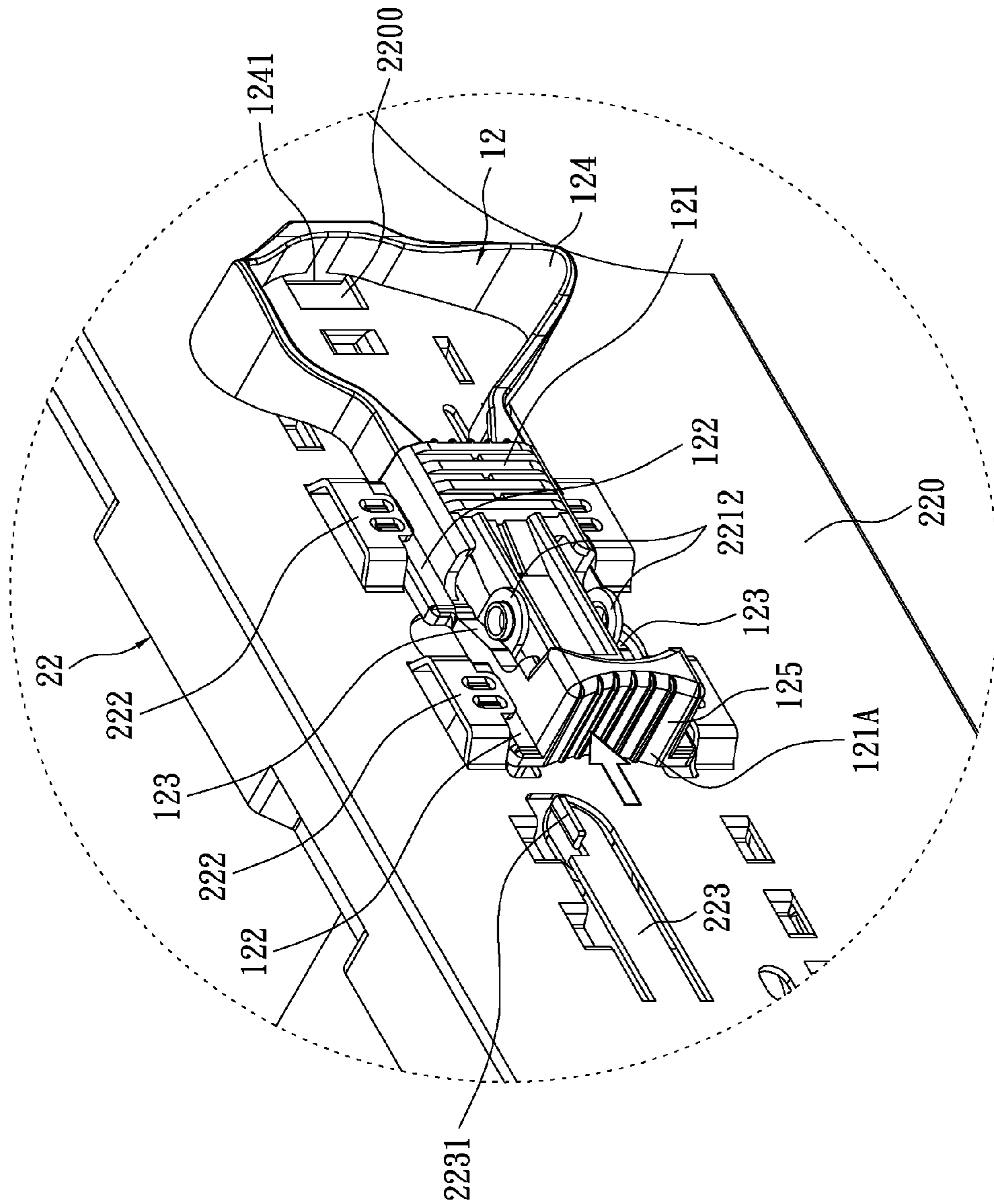


FIG. 4



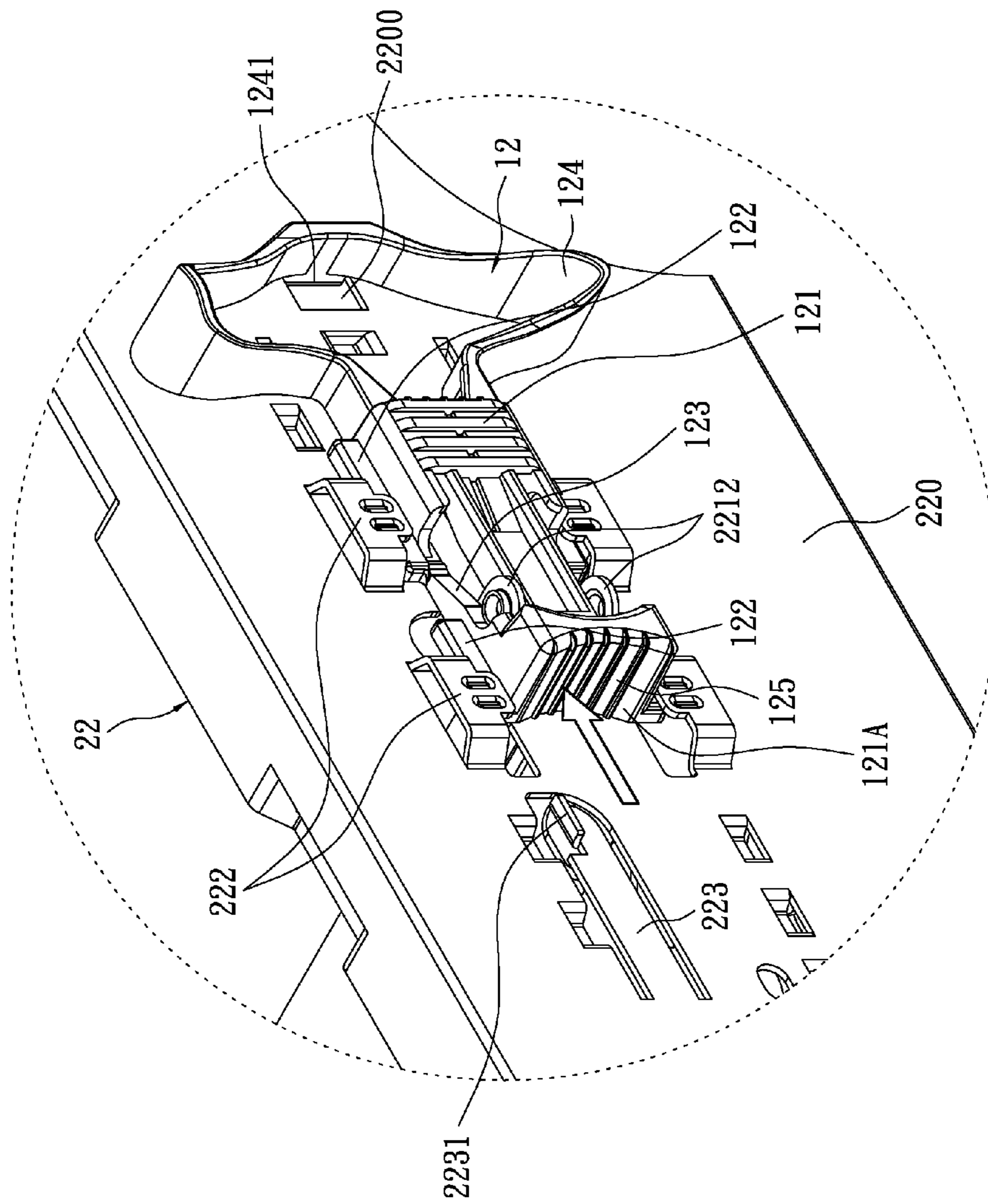


FIG. 4A

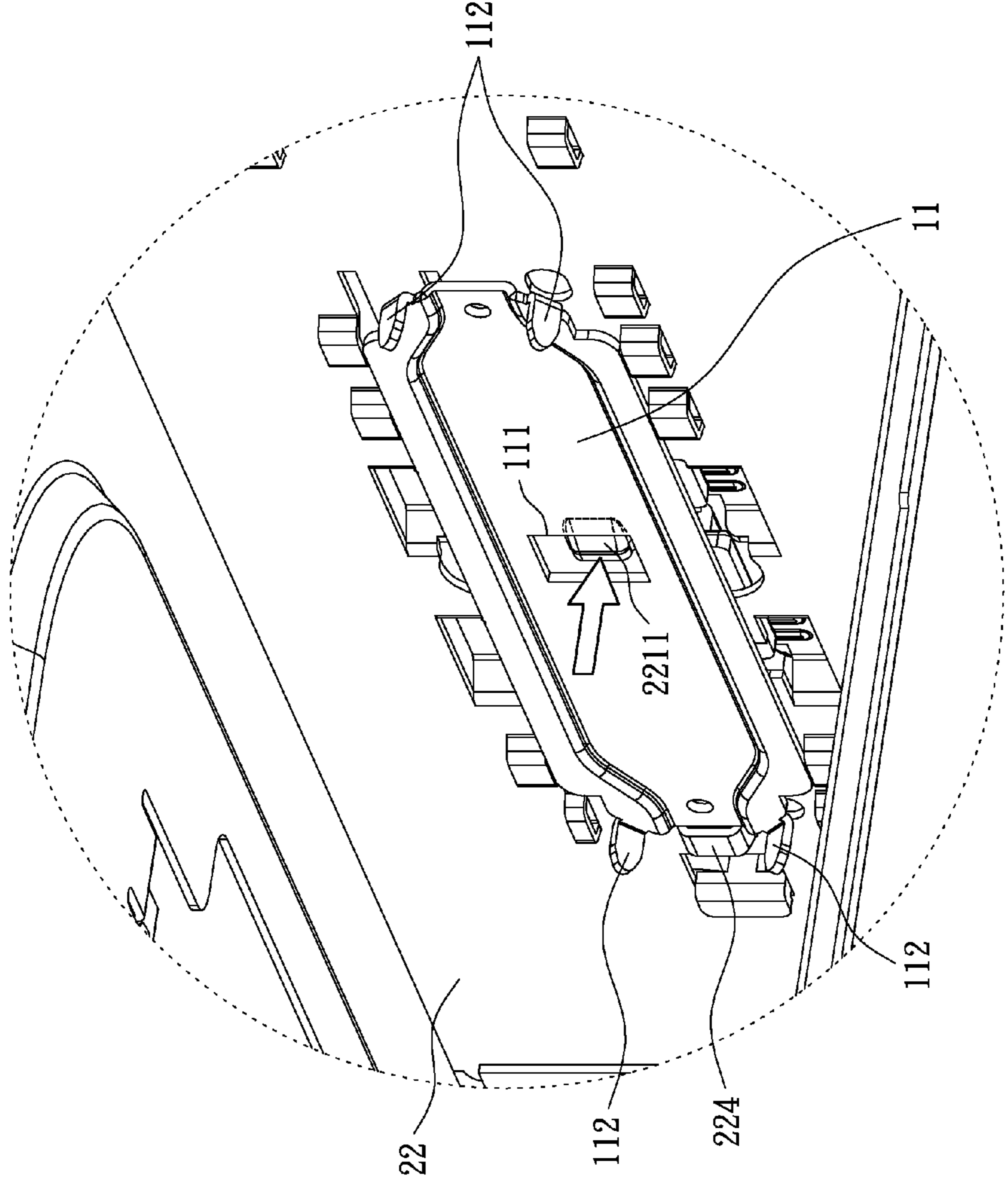


FIG. 4B

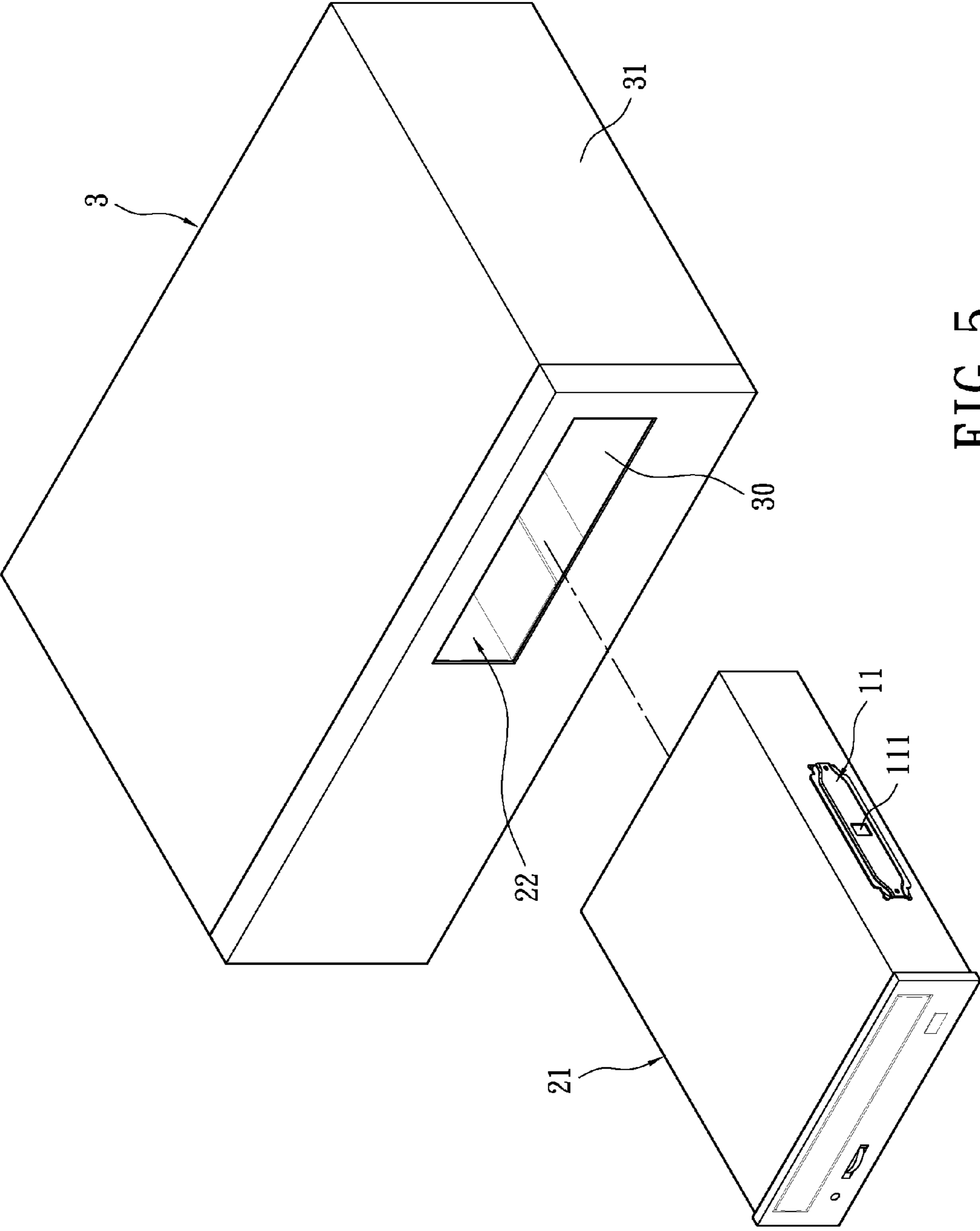


FIG. 5



**1****ASSEMBLY UNIT AND CASING HAVING THE SAME****BACKGROUND OF THE INVENTION****1. Field of the Invention**

The present invention relates to an assembly unit and a casing having the same. In particular, the present invention relates to a screw-less assembly unit and a casing having the same.

**2. Description of Related Art**

With the development of the technology, an electronic apparatus, such as a personal computer has higher efficiency. Therefore, a user can execute programs to process data by CPU of the personal computer for getting information.

In general, the electronic apparatus includes a casing and electronic units or devices received inside the casing, such as main board, CPU, RAM module, sound card, display card and storage devices. The storage devices can be classified into floppy disks, hard disks, optical disk drivers, rewritable optical disk drivers and electronic card readers. Traditionally, the storage devices are pushed in the frame inside the casing and then they are fixed in the frame inside the casing by tools and screws.

However, it is not convenient for users to fix the storage devices by tools and screws. For example, it costs time to assemble the storage devices by screws. Furthermore, the screws are easily lost and would result in the instability of the casing.

**SUMMARY OF THE INVENTION**

The instant disclosure provides an assembly unit for mounting a drawable device into a casing in a tool-less and screw-less manner.

The instant disclosure provides an assembly unit for assembling a drawable device to a casing, the assembling unit comprising: a fixing member disposed on a side wall of the drawable device and having a fixing hole; a latching member slidably disposed on the casing and corresponding to the fixing member; wherein the casing has a first tongue portion corresponding to the latching member and a fixing protrusion protruding toward the interior of the casing; and wherein the fixing protrusion engages with the fixing hole when the drawable device is assembled to the casing.

The instant disclosure provides a casing for assembling a drawable device, the drawable device being inserted into the casing, the casing comprising a plurality of plates and an assembly unit; wherein the assembly unit comprises: a fixing member disposed on a side wall of the drawable device and having a fixing hole thereon; a latching member slidably disposed on one of the plates corresponding to the fixing member; wherein said one of the plates has a first tongue portion corresponding to the latching member and a fixing protrusion protruding toward the interior of the casing; and wherein the fixing protrusion engages with the fixing hole when the drawable device is assembled to the casing.

The instant disclosure provides a casing for assembling a device, the device being inserted into the casing, the casing comprising a plurality of plates and a fixing member disposed on a side wall of the device and having a fixing hole thereon; wherein one of the plates has a first tongue portion and a fixing protrusion protruding toward the interior of the casing; and wherein the fixing protrusion engages with the fixing hole when the device is assembled to the casing.

The movement of the latching member is provided for lifting the free end of the first tongue portion and thus for

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disengaging the fixing protrusion with the fixing hole of the fixing member so that one can draw the drawable device out of the casing. On the contrary, when the drawable device is inserted into the casing, the fixing protrusion formed on the first tongue portion engages with the fixing hole of the fixing member disposed on the drawable device. Hence, the drawable device can be fixedly secured in the casing. Accordingly, the assembly unit of the present invention is provided for securing the drawable device in a screw-less and tool-less manner.

For further understanding of the present invention, reference is made to the following detailed description illustrating the embodiments and examples of the present invention. The description is for illustrative purpose only and is not intended to limit the scope of the claim.

**BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 is an exploded view showing the assembly unit of the instant disclosure for assembling the optical disk driver in the casing of a computer.

FIG. 1A shows the perspective view of the fixing member of the assembly unit of the instant disclosure.

FIG. 1B shows another perspective view of the fixing member of the assembly unit of the instant disclosure.

FIG. 1C shows that the latching member of the assembly unit is disposed on the casing and the fixing member is disposed on the storage portion of the casing.

FIG. 1D shows the enlarged view of A part of FIG. 1C.

FIG. 2 is a perspective view showing that by the assembly unit of the instant disclosure the optical disk driver is securely assembled in the casing.

FIG. 2A shows the enlarged view of B part of FIG. 2.

FIG. 2B is another perspective view showing that by means of the assembly unit of the instant disclosure, the optical disk driver is securely assembled in the casing, without displaying the optical disk driver.

FIG. 2C shows the enlarged view of C part of FIG. 2B.

FIG. 2D shows the enlarged exploded view of C part of FIG. 2B, without the latching member.

FIG. 3 shows the perspective view of the latching member of the assembly unit of the instant disclosure.

FIG. 3A shows another perspective view of the latching member of the assembly unit of the instant disclosure.

FIGS. 4 and 4A show the movement of the latching member when the latching member is forced to slide according to the instant disclosure.

FIG. 4B shows that the fixing protrusion is disengaged with the fixing hole when the latching member slides according to the instant disclosure.

FIG. 5 shows that by means of the assembly unit of the present invention, a common optical disk driver can be securely inserted directly from the exterior into a computer casing.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

The present invention provides an assembly unit for mounting a drawable device into a casing. By the assembly unit, one can secure or unsecure the drawable device onto the casing without screws. Furthermore, the assembly unit will not widely enlarge the width of the drawable device so that the assembly unit can be applied in casings of traditional size with no need of special specifications. Please note that the drawable device may be any disk driver, such as an optical disk driver, a hard disk driver, a floppy disk driver or an



electronic card reader, or any drawable tray. The casing may be a computer casing, a chassis of a server or a casing of any other apparatus, but not restricted thereby. Hereinafter, the assembly unit of the exemplary embodiment is applied for mounting an optical disk driver into a computer casing. In addition, the direction hereinafter is referenced to the direction of the optical disk driver **21**, as illustrated in FIG. **1**, inserted into the computer casing **22**. For example, the direction to which the operation panel **212** of the optical disk driver **21** faces can be referred as the front, and the opposite direction can be referred as the rear.

Please refer to FIGS. **1** through **1D**; the assembly unit of the instant disclosure comprises a fixing member **11** and a latching member **12**. The computer casing **22** may be constructed by a plurality of plates, such as a side plate **220** and a top plate **226**, and a first tongue portion **221** and a second tongue portion **223** are formed on the side plate **220**. The latching member **12** is disposed on the side plate **220** corresponding to the first tongue portion **221**. The fixing member **11** is disposed on the optical disk driver **21**. In the exemplary embodiment, the fixing member **11** is disposed on the side wall **210** of the optical disk driver **21**. The fixing member **11** and the latching member **12** correspond to each other so that the optical disk driver **21** can be assembled onto or disassembled from the computer casing **22** by using the fixing member **11** and the latching member **12**. The latching member **12** can slide relatively to the computer casing **22** to release the optical disk driver **21** and then one can draw the optical disk driver **21** away from the computer casing **22**. In the exemplary embodiment, only one fixing member **11** and one latching member **12** are used to secure the optical disk driver **21** in one-side fixing manner, but not restricted thereby. The quantities and assembling positions of the fixing member **11** and the latching member **12** can be adjusted based on applications.

As shown in FIGS. **1**, **1C** and **1D**, the optical disk driver **21** has one fixing member **11** on the side wall **210** thereof and the fixing member **11** has a fixing hole **111** thereon. The side plate **220** has a first tongue portion **221** corresponding to the latching member **12** and an abutting protrusion **224**, as illustrated in FIG. **2C**. In the exemplary embodiment, the abutting protrusion **224** protrudes from the inner surface of the side plate **220** of the casing **22** toward the interior of the casing **22**. The first tongue portion **221** has a fixing protrusion **2211** thereon. In detail, the fixing protrusion **2211** is formed substantially near to the free end of the first tongue portion **221** and protrudes toward the interior of the casing **22**. When the optical disk driver **21** is inserted into the casing **22**, as shown in FIGS. **2B** and **2C** in which the optical disk driver **21** is not displayed for concision, the fixing protrusion **2211** is engaged with the fixing hole **111** of the fixing member **11** so that the optical disk driver **21** can't be drawn forward. In addition, one end (i.e., the rear end) of the fixing member **11** abuts against the abutting protrusion **224** so that the optical disk driver **21** can't be pushed backward. Hence, the optical disk driver **21** is fixedly secured on the side plate **220** of the casing **22**.

On the other hand, the threaded holes of the common optical disk driver **21** are used as the assembling holes **211** for mounting the fixing member **11** on the optical disk driver **21**. In the exemplary embodiment, the optical disk driver **21** has four threaded holes, as shown in FIG. **1**, and the fixing member **11** has assembling pillars **112** corresponding to the assembling holes **211**. Therefore, one can insert the assembling pillars **112** to the corresponding assembling holes **211** for mounting the fixing member **11** onto the side wall **210** of the optical disk driver **21**, but not restricted thereby. Accordingly, the fixing member **11** is detachably disposed onto the side wall **210** of the optical disk driver **21**. One can fix the fixing

member **11** onto the desired drawable device such as the optical disk driver **21** for securing it onto the casing **22**. Alternatively, one can secure the drawable device onto the casing **22** by screws and the threaded holes. As the foregoing statement, the drawable device can be fixedly secured onto the casing **22** only by the fixing member **11** (i.e., without the latching member **12**) when the function of drawing away the drawable device is not necessary.

Please refer to FIGS. **1C**, **1D** and **2A**; the side plate **220** of the casing **22** has at least one pair of track portions **222** corresponding to the latching member **12**. The latching member **12** is slidably assembled on the track portions **222** to drive the movement of the first tongue portion **221**. In other words, the latching member **12** can be forced to slide along the track portions **222** and thus drive the first tongue portion **221** to have a corresponding variation in position. In detail, the latching member **12** includes a main body **121** having at least one pair of side portions **122** at two sides thereof for slidably engaged with the pair of track portions **222**. As shown in FIGS. **3** and **3A**, the main body **121** includes a front end **121A** and a rear end **121B**, and two sides of the main body **121** respectively have two side portions **122** (i.e., two pairs of the side portions **122**). Similarly, the side plate **220** of the casing **22** has two pairs of track portions **222** corresponding to the side portions **122**. However, the two sides of the main body **121** respectively have one side portion **122** (i.e., one pair of the side portions **122**) in another alternatively embodiment. Similarly, the side plate **220** of the casing **22** has one pair of track portions **222** corresponding to the side portions **122**. That means the number of the track portion **222** and the side portions **122** can be adjustable depending on the practice structure. In the exemplary embodiment, the track portion **222** can be constructed by a bent plate formed from the casing **22** to define a track. Preferably, the bent plate further has at least one convex point **2220** protruding toward the interior of the casing **22**. The side portion **122** is plate-shaped and can be slidably engaged with the track portion **222** so that the plate-shaped side portion **122** can slide along the track portion **222**. Moreover, the convex point **2220** contacts the side portion **122** in a point-contact manner for decreasing the friction between the side portion **122** and the track portion **222**. In addition, the rear end **121B** of the main body **121** of the latching member **12** further connects with an elastic member **124** and the front end **121A** of the main body **121** has a pressing portion **125**. In the exemplary embodiment, the elastic member **124** is integral with the rear end **121B** of the main body **121**. For example, the elastic member **124** can be a ring structure which is formed by bending a plastic, and two ends **1240** of the elastic member **124** are integrally formed with the rear end **121B** of the main body **121**. The middle portion **1241** of the plastic abuts against the casing **22** so that the elastic member **124** is spring biased to return the main body **121** to the first position. As shown in FIG. **2A**, the middle portion **1241** can be a bent insertion member and the side plate **220** has a corresponding insertion hole **2200** so that the middle portion **1241** of the plastic can abut against the casing **22** by cooperation of the bent insertion member and the insertion hole **2200**.

Furthermore, the first tongue portion **221** has two corresponding extending protrusions **2212**. The two extending protrusions **2212** are formed on two sides of the first tongue portion **221** in pairs and preferably, the two extending protrusions **2212** are formed near to the free end of the first tongue portion **221**. The main body **121** has two sliding slopes **123** corresponding to the extending protrusions **2212**. In the exemplary embodiment, the slanted height of the sliding slope **123** is decreased along the insertion direction of the



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optical disk driver **21**. Each extending protrusion **2212** has an arc-shaped surface. For example, platforms **2210** are respectively bent from two sides of the first tongue portion **221** and a convex ring structure formed on each platform **2210** is constructed as the extending protrusion **2212**. Therefore, the flange of the convex ring structure (i.e., the extending protrusion **2212**) can slide along the sliding slope **123**.

When one pushes the optical disk driver **21** into the casing **22** for assembling the optical disk driver **21** in the casing **22**, the fixing member **11** disposed on the side wall **210** of the optical disk driver **21** slightly interferes with the fixing protrusion **2211** of the first tongue portion **221** without moving the latching member **12**. When the fixing protrusion **2211** exactly reaches to the fixing hole **111**, the fixing protrusion **2211** is sprang into the fixing hole **111** so that the fixing protrusion **2211** engages with the fixing hole **111** of the fixing member **11** to fixedly secure the optical disk driver **21** in the casing **22**. Please refer to FIG. **2C**; the fixing protrusion **2211** preferably has a stopper surface **22111** for abutting against the inner wall of the fixing hole **111**. Therefore, the optical disk driver **21** is more securely assembled in the casing **22**.

One can force on the pressing portion **125** of the latching member **12** to release and disassemble the optical disk driver **21** from the casing **22**. While forcing on, the main body **121** of the latching member **12** slides in the direction as shown by the arrow of FIG. **4** (i.e., toward the rear side of the casing **22**). Simultaneously, the extending protrusion **2212** of the first tongue portion **221** slides along the sliding slope **123** from the lower position (i.e., the rear end of the sliding slope **123**) to the higher position (i.e., the front end of the sliding slope **123**), as shown in FIGS. **4** and **4A**. Therefore, the free end of the first tongue portion **221** is then lifted away from the optical disk driver **21** while the convex ring structure of the extending protrusion **2212** slides along the sliding slope **123**. Meanwhile, the fixing protrusion **2211** of the first tongue portion **221**, as shown in FIG. **4B**, is disengaged with the fixing hole **111** of the fixing member **11**. Thus, the optical disk driver **21** is released from the side plate **220** of the casing **22** and one can draw out the optical disk driver **21** from the casing **22**.

On the other hand, when the main body **121** of the latching member **12** is forced to slide toward the rear side of the casing **22**, the elastic member **124** is deformed due to the movement of the main body **121**. As the embodiment shown in FIG. **4A**, the elastic member **124** is compressed. One can first slightly draw back the optical disk driver **21** for disengaging the fixing protrusion **2211** with the fixing hole **111**. Then, one can stop forcing on the pressing portion **125** and further draw the optical disk driver **21** completely out of the casing **22**. Alternatively, one can directly draw the optical disk driver **21** out of the casing **22** during the pressing portion **125** is forced thereon, and then stop forcing on the pressing portion **125**. After the user stops forcing on the pressing portion **125**, the main body **121** returns to a first position (i.e., the original position) as shown in FIG. **2A** due to the resilient force of the compressed elastic member **124**. Briefly speaking, when one forces on the pressing portion **125** to slide the main body **121** for disengaging the optical disk driver **21** with the casing **22**, the elastic member **124** is compressed. After drawing out the optical disk driver **21** from the casing **22**, the user stops forcing on the pressing portion **125** and then the main body **121** returns to the original position due to the resilient force of the compressed elastic member **124**. In another embodiment, the elastic member **124** can be any elastic members, such as springs, elastic piece and so on. On the other hand, the elastic member **124** can be disposed in any suitable position and not restricted by the above-mentioned example.

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On the other hand, the main body **121** of the latching member **12** has a rib **126** on the inner side thereof as shown in FIG. **3A** for substantially pushing the free end of the first tongue portion **221** back to its original position. Corresponding to the rib **126**, the first tongue portion **221** has an auxiliary protrusion **2213**, as shown in FIG. **1D**, which forms on the outer surface of the side plate **220** of the casing **22** and protrudes toward the exterior of the casing **22**. In detail, the rib **126** is formed inside the main body **121** and extends along the longitude direction defined by the front end **121A** and the rear end **121B**. During the main body **121** returns to the original position due to the resilient force of the elastic member **124**, the rib **126** interferes with the auxiliary protrusion **2213**. In detail, the rib **126** has an interfering slope **126A** with increasing height from the front to the rear and an interfering top **126B** extended from the interfering slope **126A**. Furthermore, the interfering top **126B** has a limiting concave **126C** thereon. The interfering slope **126A** and the interfering top **126B** are formed inside the main body **121**. When the main body **121** slides back to the original position from the rear to the front, the interfering slope **126A** and the interfering top **126B** contact the top surface of the auxiliary protrusion **2213** in sequence for pushing the free end of the first tongue portion **221** back to its original position. Moreover, the interfering slope **126A** can be used to improve the sliding smoothness between the rib **126** and the auxiliary protrusion **2213**. The limiting concave **126C** can preferably be used for fixing the top end of the auxiliary protrusion **2213** on the rib **126**. By the auxiliary protrusion **2213** and the rib **126**, the first tongue portion **221** can be pushed back to its original position when the optical disk driver **21** is drawn away from the casing **22** so that the first tongue portion **221** is ready to secure another optical disk driver **21**. On the other hand, when the optical disk driver **21** is assembled on the casing **22**, the rib **126** interferes with the auxiliary protrusion **2213** due to the structures of the interfering slope **126A** and the interfering top **126B** such that the first tongue portion **221** is pressed to engage the fixing protrusion **2211** with the fixing hole **111**. Briefly speaking, the rib **126** and the auxiliary protrusion **2213** can cooperate with each other to improve the assembling stability of the optical disk driver **21** within the casing **22**.

Please refer to FIGS. **2A** and **2C**; the casing **22** has a second tongue portion **223** corresponding to the front end **121A** of the main body **121**. The second tongue portion **223** is substantially disposed at the front of the front end **121A** such that the free end of the second tongue portion **223** can prevent the latching member **12** from escaping from the casing **22**. In detail, the free end of the second tongue portion **223** can have a retarding protrusion **2231**. When the optical disk driver **21** is pushed into the casing **22**, the free end of the second tongue portion **223** is pressed by the side wall **210** of the optical disk driver **21** to prevent the free end of the second tongue portion **223** from indenting toward the interior of the casing **22**; and the retarding protrusion **2231** can be used to block the front end **121A** of the main body **121** so as to prevent the latching member **12** from sliding forward and dropping off. As a result, the reliability of the assembly unit for securing the drawable device can be insured.

As shown in FIG. **1**, the casing **22** has a storage portion **225**. The fixing member **11** can be temporarily and detachably disposed on the storage portion **225**, as shown in FIG. **1C**, when the fixing member **11** is not yet used to secure the optical disk driver **21** with the casing **22**. Therefore, the issue of losing the fixing member **11** can be avoided. In the exemplary embodiment, the storage portion **225** can preferably be storage slots which are formed in a whole on the top plate **226**



of the casing 22. It is convenient for the user to detach the fixing member 11 to assembling the fixing member 11 on the optical disk driver 21 and then to securely assemble the optical disk driver 21 on the casing 22.

To sum up, the assembly unit constructed by the fixing member 11 and the latching member 12 in the present invention can be provided for securely assembling a drawable device, such as an optical disk driver 21 to a casing, such as the casing 22 of the computer. In addition, the fixing member 11 has a thickness in a predetermined range, preferably less than or equal to 1 mm. For example, the fixing member 11 can be a metal plate. One can directly insert the optical disk driver 21 having the fixing member 11 disposed thereon into the computer housing 3 through the insertion opening 30 outside of the casing 22. As shown in FIG. 5, the computer housing 3 is constructed by the casing 22 and the cover plate 31. In other words, it is not necessary for the user to detach the cover plate 31 from the computer housing 3 to assemble the optical disk driver 21 onto the casing 22 of the computer housing 3. Moreover, the fixing member 11 can be disposed on the normal optical disk driver 21 by the inherent threaded holes of the optical disk driver 21. In other words, the assembly unit of the present invention is suitable for securing a common optical disk driver 21 into the casing 22 and it is not necessary to additionally manufacture an optical disk driver 21 and casing 22 with special size and specification. In the hereinbefore embodiment, the casing 22 is a chassis of a computer housing 3. In an alternative embodiment, the casing 22 can be a complete computer housing having the cover plate 31 and the latching 12 can be assembled on the outer plate of the computer housing in an exposed manner for achieve the assembling/disassembling the optical disk driver 21 with the casing 22.

The present invention is provided for stably assembling the optical disk driver 21 to the casing 22 and for efficiently disassembling the optical disk driver 21 from the casing 22 by means of cooperation of the fixing member 11 and the latching member 12. The movement of the latching member 12 can be mechanically used to release the secured optical disk driver 21. Therefore, the fixing member 11 disposed at a single side of the optical disk driver 21 and the corresponding latching member 12 disposed at the casing 22 can achieve securely assembling and drawably detaching the optical disk driver 21. Still further, it is no necessary to assemble/disassemble the optical disk driver 21 by screws and tools.

The description above only illustrates specific embodiments and examples of the present invention. The present invention should therefore cover various modifications and variations made to the herein-described structure and operations of the present invention, provided they fall within the scope of the present invention as defined in the following appended claims.

What is claimed is:

1. A casing for assembling a drawable device, the drawable device being inserted into the casing, the casing comprising: a plurality of plates and an assembly unit; wherein the assembly unit comprises: a fixing member disposed on a side wall of the drawable device and having a fixing hole; a latching member slidably disposed on one of the plates corresponding to the fixing member; wherein a first tongue portion is formed on the one of the plates and corresponds to the latching member, wherein the first tongue portion has a free end and a fixing protrusion formed substantially near to the free end and protruding toward the interior of the casing; and

wherein the fixing protrusion engages with the fixing hole when the drawable device is assembled to the casing, wherein said one of the plates has at least one pair of corresponding track portions, the first tongue portion has two corresponding extending protrusions, the latching member includes a main body having at least one pair of side portions for slidably engaged with the pair of track portions at two sides thereof, and the main body has two sliding slopes respectively corresponding to the two extending protrusions;

wherein each of the extending protrusions slides along the corresponding sliding slope for lifting the first tongue portion away from the drawable device when the latching member is forced to slide, thereby the fixing protrusion disengages with the fixing hole and the drawable device can be drawn away from an insertion opening of the casing.

2. The casing as claimed in claim 1, wherein the main body further has a rib at the inner side thereof, and the first tongue portion has an auxiliary protrusion protruding toward the exterior of the casing and corresponding to the rib to interfere therewith.

3. The casing as claimed in claim 1, wherein the main body includes a front end and a rear end, the front end has a pressing portion, and the rear end connects with an elastic member substantially fixed onto said one of the plates, thereby the elastic member is spring biased to return to a first position.

4. The casing as claimed in claim 3, wherein the elastic member is formed by bending a plastic, two ends of the elastic member are integrally formed with the rear end, and the elastic member has a bent insertion arranged on a middle portion thereof, the bent insertion inserts into an insertion hole of the casing, and wherein the latching member is slidable with respect to the casing to compress the elastic member or return to the first position thereof by the resilient force of the compressed elastic member and cooperation of the bent insertion and the insertion hole of the casing.

5. The casing as claimed in claim 1, wherein the drawable device is a disk driver, the casing is a housing or chassis of a computer, or a chassis or a housing of a server, and the casing further has an insertion opening through which the drawable device is inserted.

6. The casing as claimed in claim 1, wherein the fixing member is a metal plate of a thickness less than or equal to 1 mm.

7. An assembly unit for assembling a drawable device to a casing having a plurality of plates, the assembling unit comprising:

a fixing member disposed on a side wall of the drawable device and having a fixing hole; and

a latching member slidably disposed on the casing and corresponding to the fixing member, wherein the latching member includes a main body comprising a rib at the inner side thereof, and the rib includes an interfering slope and an interfering top extended from the interfering slope,

wherein a first tongue portion is formed on one of the plates and corresponds to the latching member, the first tongue portion has a free end, a fixing protrusion formed substantially near to the free end and protruding toward the interior of the casing, and an auxiliary protrusion protruding toward the exterior of the casing and corresponding to the rib to interfere therewith,

wherein the fixing protrusion engages with the fixing hole and the interfering top of the rib is fixed on the auxiliary protrusion when the drawable device is assembled to the casing,



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wherein the interfering slope and the interfering top are configured to contact the auxiliary protrusion for pushing the free end back when the drawable device is drawn away from the casing,

wherein the casing has at least one pair of corresponding track portions, the first tongue portion has two corresponding extending protrusions, the main body further comprises at least one pair of side portions for slidably engaged with the pair of track portions at two sides thereof, and the main body has two sliding slopes respectively corresponding to the two extending protrusions;

wherein each of the extending protrusions slides along the corresponding sliding slope for lifting the first tongue portion away from the drawable device when the latching member is forced to slide, thereby the fixing protrusion disengages with the fixing hole and the drawable device can be drawn away from the casing.

8. The assembly unit as claimed in claim 7, wherein the main body further includes a front end and a rear end, the front end has a pressing portion, and the rear end connects with an

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elastic member substantially fixed onto the casing, thereby the elastic member is spring biased to return the main body to a first position.

9. The assembly unit as claimed in claim 8, wherein the elastic member is formed by bending a plastic, two ends of the plastic are integrally formed with the rear end, and the middle portion of the plastic abuts against the casing.

10. The assembly unit as claimed in claim 7, wherein the side wall of the drawable device has a plurality of assembling holes, the fixing member has a plurality of assembling pillars corresponding to the assembling holes, and the assembling pillars are respectively inserted into the assembling holes so that the fixing member is detachably disposed onto the side wall.

11. The assembly unit as claimed in claim 7, wherein the drawable device is a disk driver, the casing is a housing or chassis of a computer, or a chassis or a housing of a server.

12. The assembly unit as claimed in claim 7, wherein the fixing member is a metal plate of a thickness less than or equal to 1 mm.

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